

[54] ELECTRONIC FLASH PARAMETER
CALCULATOR DEVICE[75] Inventors: **Kotaro Yata, Ikeda; Yoshimaru
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[58] Field of Search..... 235/64.7, 88

[56] References Cited

UNITED STATES PATENTS

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|-----------|---------|--------------|------------|
| 2,445,008 | 7/1948 | Smidt..... | 235/64.7 X |
| 2,489,664 | 11/1949 | Norwood..... | 235/64.7 |
| 2,815,171 | 12/1957 | Norwood..... | 235/64.7 |
| 3,232,401 | 2/1966 | Jones..... | 235/88 X |
| 3,769,888 | 11/1973 | Quinn..... | 235/64.7 X |

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[57]

ABSTRACT

A flash parameter calculator includes an assembly of an outer knob with a flat face having a transparent half and an opposite half with a medial window, a coaxial inner knob projecting through the outer knob and three superimposed annuli underlying the outer knob, the upper annulus being fixed, the intermediate annulus being rotated by the inner knob and the bottom annulus being independently angularly adjustable. The outer knob transparent half carries circumferentially spaced lens opening designating indicia, the upper annulus carries along one half circumferentially extending first range indicia along one half and film speed rating indicia along the other half, the intermediate annulus is provided with a transparent border extending for part of the circumference, and the bottom annulus carries circumferentially spaced distance designating indicia. The distance indicia is radially spaced from the lens opening indicia which are observable through the outer knob transparent portion and the film speed indicia are viewable through the window, the range indicia delineate limited ranges of the distance and lens opening indicia.

6 Claims, 3 Drawing Figures

